

IN THE ABSTRACT:

Following the Claims, please add the Abstract as follows:

--Abstract of the Disclosure

A method of generating non-thermal atmospheric gas plasmas using an applied voltage with specially-shaped waveforms. The waveforms are shaped to avoid energy wastage by attenuating the voltage in the period after current discharge has occurred. A control system may also be used to shape the applied voltage waveform in response to the gas discharge current.--